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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/504,150	02/15/2000	Michael George Bunn	190-1445	7518

7590 10/31/2003  
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EXAMINER
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KIM, JUNG W

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 10/31/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/504,150	BUNN, MICHAEL GEORGE	
	Examiner	Art Unit	
	Jung W Kim	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4,5</u> . | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: on page 4, line 13, the word 'summarized' is misspelled. Appropriate correction is required.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: 'A method and system for cryptographically authenticating a printed document by a trusted party'.

### ***Claim Objections***

3. Claim 8 is objected to because of the following informalities: The sentence defining the claim is not grammatical. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 8 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 8 recites the phrase "known to both the authentication authority". Only one authentication authority was defined.

7. Claim 12 recites the limitation "the certificate". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-11, 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kocher U.S. Patent No. 6,188,766 (hereinafter Kocher). The invention as disclosed in the claims reads on a plurality of well-known authentication protocols, which define steps to provide document certification and verification by a trusted party. These protocols are found in several inventions include the one disclosed by Kocher. As per claim 1, Kocher discloses a method for authenticating a printed document comprising the following steps:

a) a document producer sends information to be included in a document to an authentication authority (see Kocher, Figures 1, 2; col. 3, lines 29-38);

b) the authentication authority cryptographically generates an authentication code from this information, and sends the authentication code back to the document producer (see Kocher, Figures 1, 2; col. 3, lines 39-55; col. 4, lines 3-5; col. 7, line 10-col. 10, line 8, 'Document Submission And Timestamping');

c) the document producer prints the document, including both the information and the authentication code (see Kocher, Figure 4; col. 8, lines 33-62);

d) a document checker cryptographically checks the authentication code against the information in the document (see Kocher, Figure 3; col. 3, line 55-col. 4, line 9; col. 10, line 9-col. 12, line 12, 'Timestamp Verification').

The aforementioned covers claim 1.

10. As per claim 2, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the document producer includes a bar code in the document, the bar code containing the authentication code, and wherein the document authenticator is provided with means for reading the bar code to obtain the authentication code (see Kocher, Figure 4; col. 3, lines 48-55).

11. As per claim 3, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the document includes a pre-printed serial number, which is sent to the authentication

authority, and wherein the authentication authority uses the pre-printed serial number in generating the authentication code (see Kocher, col. 7, lines 22-42).

12. As per claim 4, Kocher discloses a method for authenticating a printed document as outlined above in the claim 3 rejection under 35 U.S.C. 102(e). In addition, the pre-printed serial number is included in the document as a pre-printed bar code (see Kocher, col. 7, lines 31-37).

13. As per claim 5, Kocher discloses a method for authenticating a printed document as outlined above in the claim 4 rejection under 35 U.S.C. 102(e). In addition, the document producer uses a combined printer and bar-code scanner to read the pre-printed bar code and then to print the document (see Kocher, Figure 4; col. 9, lines 10-49).

14. As per claim 6, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the document checker performs the following steps:

a) entering the authentication code and information in the document into a computer (see Kocher, Figure 3; col. 10, lines 12-27);

b) causing the computer to cryptographically generate a check code from the information (see Kocher, Figure 3; col. 10, lines 27-45; col. 4, lines 3-5; col. 6, lines 26-49);

c) causing the computer to compare the check code with the authentication code and to generate a warning indication if the check code does not correspond with the authentication code (see Kocher, Figure 3; col. 10, lines 45-46).

15. As per claim 7, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the authentication authority cryptographically generates the authentication code using a cryptographic key associated with the authentication authority (see Kocher, col. 7, lines 46-56).

16. As per claim 8, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the cryptographic key is a secret key known to both the authentication authority and the document producer (see Kocher, col. 6, lines 34-49).

17. As per claim 9, Kocher discloses a method for authenticating a printed document as outlined above in the claim 8 rejection under 35 U.S.C. 102(e). In addition, the authentication code is generated by performing a key-dependent one-way hash of the information, using the secret key (see Kocher, col. 7, lines 46-56).

18. As per claim 10, Kocher discloses a method for authenticating a printed document as outlined above in the claim 7 rejection under 35 U.S.C. 102(e). In

addition, the authentication authority generates the authentication code using the private key of a public/private key pair, and wherein the document checker checks the authentication code using the public key of the public/private key pair (see Kocher, col. 10, lines 36-45).

19. As per claim 11, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the communication between the document producer and the authentication authority is protected by encryption (see Kocher, col. 13, lines 35-39).

20. As per claims 13-15, they are apparatus claims corresponding to claims 1-11 and they do not teach or define above the information claimed in claims 1-11. Therefore, claims 13-15 are rejected as being anticipated by Kocher for the same reasons set forth in the rejections of claims 1-11.

***Claim Rejections - 35 USC § 103***

21. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kocher in view of VeriSign Certification Practice Statement version 1.2 (hereinafter VeriSign). As per claim 12, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, Kocher discloses that a certificate is created by the authentication authority to verify the legitimacy of a document (see Kocher, col. 5, lines 50-63). Kocher is silent on the



matter of offering the document producer an option of having a certificate printed by the authentication authority instead of printing the certificate. However, having the option of publishing a certificate in non-local repositories is often implemented in the art. For example, VeriSign teaches that publication of certificates generated for subscribers are published by the issuing authority in the central repository and in one or more other repositories under the discretion of the issuing authority. Furthermore, VeriSign discloses that the subscribers of the certificate may publish their certificates in other repositories (see VeriSign, section 7.5, 'Publication'). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to specify an option of having the certificate printed by the authentication authority instead of printing the certificate locally. Motivation for such a combination would enable a certificate to be printed by a trusted source and disallow untrusted sources to print the certificate.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wolff et al. U.S. Patent No. 5,671,282 discloses a method and apparatus for document verification and tracking.

Newman U.S. Patent No. 5,671,285 discloses a secure communication system.

Holloway et al. U.S. Patent No. 5,912,974 discloses an apparatus and method for authentication of printed documents.

Romney et al. U.S. Patent No. 6,085,322 discloses a method and apparatus for establishing the authenticity of an electronic document.

Walker et al. U.S. Patent No. 6,111,953 discloses a method and apparatus for authenticating a document.

Kahn et al. U.S. Patent No. 6,135,646 discloses a system for identifying, managing and tracking digital objects.

Ginter et al. U.S. Patent No. 6,253,193 discloses systems and methods for the secure transaction management and electronic rights protection.

Keshav U.S. Patent No. 6,363,483 discloses methods and systems for performing article authentication.

Keronen et al. U.S. Patent No. 6,567,530 discloses a device and method for authenticating and certifying printed documents.

Dwork et al. EP Patent Application No. EP 0782114 A2 discloses a system and method for verifying signatures on documents.

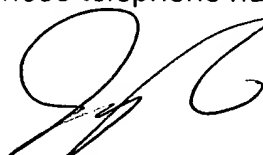
Ray et al. EP Patent Application No. EP 0729120 A2 discloses a method and apparatus for image based validations of printed documents.

Leighton et al. U.S. Patent Application No. 5,351,302 discloses a method for authenticating objects identified by images or other identifying information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W Kim whose telephone number is (703) 305-8289. The examiner can normally be reached on M-F 9:00 A.M. to 5:00 P.M..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Jung W Kim  
Examiner  
Art Unit 2132

Jk  
October 24, 2003



JUSTIN T. DARROW  
PRIMARY EXAMINER